

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

PCT

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

(PCT Rule 43bis.1)

		Date of mailing (day/month/year)
Applicant's or agent's file reference PTN-9001WO		FOR FURTHER ACTION See paragraph 2 below
International application No. PCT/JP2005/001583	International filing date (day/month/year) 03.02.2005	Priority date (day/month/year) 16.02.2004
International Patent Classification (IPC) or both national classification and IPC		
Applicant TECHNO NETWORK SHIKOKU CO., LTD.		

<p>1. This opinion contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>
<p>2. FURTHER ACTION</p> <p>If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.</p> <p>If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.</p> <p>For further options, see Form PCT/ISA/220.</p> <p>3. For further details, see notes to Form PCT/ISA/220.</p>

Name and mailing address of the ISA/JP	Authorized officer
Facsimile No.	Telephone No.

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International application No.
PCT/JP2005/001583

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
 a sequence listing
 table(s) related to the sequence listing
 - b. format of material
 in written format
 in computer readable form
 - c. time of filing/furnishing
 contained in the international application as filed.
 filed together with the international application in computer readable form.
 furnished subsequently to this Authority for the purposes of search.
3. In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement																									
<p>1. Statement</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Novelty (N)</td> <td style="width: 40%;">Claims</td> <td style="width: 40%;"><u>2, 3, 5</u></td> <td style="width: 10%; text-align: right;">YES</td> </tr> <tr> <td></td> <td>Claims</td> <td><u>1, 4, 6, 7</u></td> <td style="text-align: right;">NO</td> </tr> <tr> <td>Inventive step (IS)</td> <td>Claims</td> <td></td> <td style="text-align: right;">YES</td> </tr> <tr> <td></td> <td>Claims</td> <td><u>1-7</u></td> <td style="text-align: right;">NO</td> </tr> <tr> <td>Industrial applicability (IA)</td> <td>Claims</td> <td><u>1-7</u></td> <td style="text-align: right;">YES</td> </tr> <tr> <td></td> <td>Claims</td> <td></td> <td style="text-align: right;">NO</td> </tr> </table> <p>2. Citations and explanations:</p> <p>Document 1: JP 2001-514189 A (Wisconsin Alamanni Research Foundation) Document 2: JP 10-500298 A (Medical Research Council)</p> <p>Regarding claims 1, 4, 6 and 7</p> <p>The inventions described in claims 1, 4, 6 and 7 do not appear to be novel based on document 1 cited in the ISR. Document 1 describes a collagen-like triple-helix structure comprising peptides of $(ProFlpGly)_{10}$, $(ProProGly)_{10}$, and $(ProHypGly)_{10}$. These peptides form a collagen-like triple-helix structure having a chain length of 10, and the triple-helix sections being displaced from one another at the distance of only 1/4 of such length.</p> <p>Regarding claims 2, 3 and 5</p> <p>The inventions described in claims 2, 3, and 5 appear to be novel; however, they do not appear to involve an inventive step based on documents 1 and 2 cited in the ISR. The inventions of documents 1 and 2 have the same technical problem in terms of enhancing stability of a peptide trimer. To the invention of document 1, in view toward solving such common technical problem, applying means for enhancing stability of a peptide trimer using disulfide bonds would be obvious to a party skilled in the art.</p>			Novelty (N)	Claims	<u>2, 3, 5</u>	YES		Claims	<u>1, 4, 6, 7</u>	NO	Inventive step (IS)	Claims		YES		Claims	<u>1-7</u>	NO	Industrial applicability (IA)	Claims	<u>1-7</u>	YES		Claims		NO
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